

Remarks

Claims 1 and 12 have been amended. Claims 1 to 16 are pending.

Examination and reconsideration of the application as amended is requested.

Claim 1 has been amended to add the feature that inventive composition is capable of forming a hydrophobic film. Support for the amendment can be found throughout the specification, e.g., on page 4, lines 12.

Claim 12 has been amended to correct for an inadvertent typographical error.

The Examiner objected to claim 3 suggesting a possible spelling error in the term "menthyl methacrylate." Applicants did not amend the claim because they do mean to use the term "menthyl methacrylate", i.e., the methacrylate ester of menthol. Menthyl methacrylate is a cyclic alcohol.

Applicants' Invention

Applicants' invention is directed to a composition in the form of an aqueous emulsion or dispersion. Applicants defined the term "dispersion" on page 3, starting at line 21 in their description. In brief summary, the composition comprises (a) at least one copolymer and (b) an aqueous carrier. The copolymer comprises component (a)(i), i.e., (meth)acrylate esters of C4 to C18 straight chain and/or branched alkyl alcohol and component (a)(ii), i.e., (meth)acrylate ester of a saturated or unsaturated cyclic alcohol containing 6 to 20 carbon atoms. The composition is useful in cosmetic and personal care applications.

§ 102 Rejections

Claims 1-9 and 11-14 stand rejected under 35 U.S.C. § 102(a) and (e) as being anticipated by US 6 126 929 (Mougin).

In very brief summary, Mougin discloses a cosmetic composition comprising (A) at least one aqueous dispersion of polymer particles which can form a film by themselves or can form a film in the presence of at least one plasticizer and (B) at least one aqueous dispersion of spherical or anisotropic, non-film-forming particles. Mougin states that her B particles are capable of forming a percolation network, meaning a network formed by the B particles by interconnection and formation of aggregates.¹ Thus, Mougin's invention deals with forming a composite material

¹ See US 6 126 929 @ column 2, lines 50-56

where the B particles are present in high enough concentration that upon dry down they form aggregates and interconnections (i.e., a "percolation network") within the matrix of A particles.

Mougin does not disclose the copolymerization of her A and B components. Instead, Mougin creates a blend of polymer particles A and B, which can be prepared, e.g., by separately polymerizing monomers "a" and "b". While it may be possible to copolymerize monomers "a" and "b" to form copolymer AB, this copolymer would either be film forming or non-film-forming — one would not form both species required to give Mougin's percolation network.

Applicants, on the other hand, specify that the a(i) and a(ii) components are copolymerized to form a composition capable of forming a hydrophobic film. Thus, Mougin does not anticipate Applicants' invention.

Claims 1-8 and 10-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by US 5 662 892 (Bolich, Jr. et al).

In very brief summary, Bolich discloses a composition comprising (a) a hydrophobic linear random copolymer and (b) a hydrophobic, volatile branched hydrocarbon solvent for the copolymer.² Bolich states that the composition also comprise a suitable carrier that can include water and other hydrophilic fluids.³ The preferred compositions are in the form of a discontinuous phase of dispersed droplets of the copolymer and solvent distributed throughout the carrier.⁴ Bolich discloses that preferred hydrocarbon solvents (those having boiling points greater than about 100° C) aid in obtaining a smoother polymer film upon drying.⁵ Such a solvent would be considered by one skilled in the art to be a slow drying solvent because of the high boiling point of 100° C.

Bolich does not anticipate Applicants' invention because Bolich uses a hydrophobic, volatile, branched hydrocarbon solvent consisting essentially of one or more branched chain hydrocarbons containing from about 10 to 16 carbon atoms. Applicants' invention pertains to an emulsion or a dispersion and not a solution like that of Bolich. Furthermore, although Applicants allow for the use of solvents (those in claims 15 and 16), they are considered by one skilled in the

² See US 5 662 892 @ column 2, lines 29 and 49-50

³ See US 5 662 892 @ column 7, lines 29 and 41-42

⁴ See US 5 662 892 @ column 7, lines 48-51

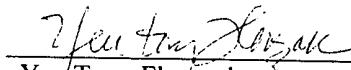
⁵ See US 5 662 892 @ column 7, lines 10-14

art to be rapidly evaporating solvents. Bolich, on the other hand, implies that without the use of his slow drying hydrocarbon solvents, poor film formation will result. On the contrary, Applicants have found that good film formation can be obtained directly from an aqueous emulsion or dispersion.

In view of the above, it is submitted that the application is in condition for allowance. Allowance of claims 1 to 16 , as amended, at an early date is solicited.

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Respectfully submitted,

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Version With Markings to Show Changes Made**In the claims:**

1. A composition in the form of an aqueous emulsion or dispersion, said composition comprising:
 - (a) at least one copolymer comprising (i) about 10 to 85 weight percent of (meth)acrylate ester of C₄ to C₁₈ straight and/or branched chain alkyl alcohol, (ii) about 10 to 70 weight percent of (meth)acrylate ester of a saturated or unsaturated cyclic alcohol containing 6 to 20 carbon atoms; and
 - (b) an aqueous carrier, solvent, or vehicle component,
said composition capable of forming hydrophobic film and used for cosmetic and personal care applications, wherein when said cosmetic application is a hair care composition, said hair care composition does not have a reshapeable effect.
12. The composition of claim 1 further comprising ingredients selected from the group consisting of emollients, humectants, propellants, pigments, dyes, buffers, organic suspending agents, inorganic suspending agents, organic thickening agents, inorganic thickening agents, waxes, surfactants, plasticizers, preservatives, flavoring agents, perfumes, vitamins, herbal extracts, skin bleaching agents, hair bleaching agents, skin coloring agents, hair coloring agents, antimicrobial agents, [and] antifungal agents and combinations thereof.